

What is claimed is:

1. A voltage converter device (101a, 101b) for converting a signal (in) at an initial voltage level (vint) into a signal (DatoV) at a second voltage level (vddq) which is different to the initial voltage level (vint), the voltage converter device (101a, 101b) containing an amplifier device (102), characterised by
that for generating signals (DatoV) at the second voltage level (vddq), a second amplifier device output signal (bout) is used in addition to, and differing from, a first output signal (out) of the amplifier device (102).
2. A voltage converter device (101a, 101b) according to Claim 1, in which the first and the second amplifier device output signals (out, bout) are mutually complementary signals.
3. A voltage converter device (101a, 101b) according to Claims 1 or 2, in which a flank of the first amplifier device output signal (out) triggers the signal (DatoV) at the second voltage level (vddq) to change from a first to a second state, and in which a flank displaced in time in relation to the flank of the first amplifier device output signal (out), triggers the signal (DatoV) at the second voltage level (vddq) to change from a second back into a first state.
4. A voltage converter device (101a, 101b) according to Claim 3, in which the triggering flank of the first amplifier device output signal (out) is a positive flank, and the triggering flank of the second amplifier device output signal (bout) is also a positive flank.
5. A voltage converter device (101a, 101b) according to Claim 3, in which the triggering flank of the first amplifier device output signal (out) is a negative flank, and the triggering flank of the second amplifier device output signal (bout) is also a negative flank.

6. A voltage converter device (101a, 101b) according to any of the above claims, in which a first transmission gate (113b) is controlled by the first amplifier device output signal (out), or another signal derived from it, and a second transmission gate (113a) is controlled by the second amplifier device output signal (bout), or another signal derived from it.
7. A voltage converter device (101a, 101b) according to Claim 6, in which the first amplifier device output signal (out) or a signal derived from it, is used to switch through an input of the first transmission gate (113b), where a relatively high voltage is present, to an output (114b) of the first transmission gate (113b).
8. A voltage converter device (101a, 101b) according to Claim 6 or 7, in which the second amplifier device output signal (bout), or a signal derived from it, is used to switch through an input of the second transmission gate (113b), where a relatively low voltage – in particular a ground – is present, to an output (114a) of the second transmission gate (113a).
9. A voltage converter device (101a, 101b) according to Claim 8, in which the outputs (114a, 114b) of the transmission gates (113a, 113b) are connected to each other.
10. A voltage converter device (101a, 101b) according to any of the above claims, in which the first voltage level (vint) is lower than the second voltage level (vddq).
11. A voltage converter device (101a, 101b) according to Claim 10, in which the first voltage level (vint) varies from 1.2 V to 1.9 V, but more particularly from 1.4 V to 1.6 V, and the second voltage level (vddq) from 1.5 V to 2.2 V, but more particularly from 1.7 V to 1.9 V.

12. A voltage converter device (101a, 101b) according to any of the above claims, in which the amplifier device (102) has several cross-connected transistors (104a, 104b, 106a, 106b).

13. A voltage converter device (101a, 101b) according to Claim 12, in which the transistors (104a, 104b, 106a, 106b) are field effect transistors.